BUILD AN ATOM SIMULATION

https://bit.ly/1rNguwf

Name: _____

Pre-lab for Build an Atom

1. You build an atom that has the following components:

   3 protons (P)
   4 neutrons (N)
   3 electrons (E)

Draw a picture of how you would build your atom below:

Circle which element this atom is on this periodic table below:

H																	He
Li	Be											B	C	N	O	F	Ne
Na	Mg											Al	Si	P	S	Cl	Ar
K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr
Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe

i) What is the atomic number of this atom? _____

ii) What is the atomic mass of this atom? _____

iii) What is the standard notation for this element?

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Build an Atom

1. Explore the ***Build an Atom*** simulation.

   A. What parts go in the center of the atom? _____

   B. Build the following atoms to determine the identity. Complete the chart below.

	Particles	What Element?	Draw the Bohr Diagram	Is the element a metal, non-metal or metalloid?	List 3 physical properties you would expect for this element
1.	Protons: 6 Neutrons: 6 Electrons: 6 Atomic number: ____ Atomic mass: _____				
2.	Protons: 14 Neutrons: 14 Electrons: 14 Atomic number: ____ Atomic mass: _____				
3.	Protons: 11 Neutrons: 12 Electrons: 11 Atomic number: ____ Atomic mass: _____				

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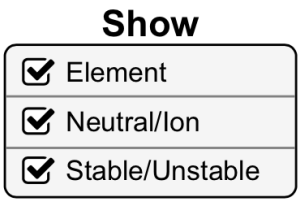

2. I) Building the 2 atoms below given the atomic number and atomic mass.
ii) Click the stable check box in the bottom right →
iii) Draw the standard notation and the Bohr diagram for each.

Standard Notation

Bohr Diagram

Particles	
Protons: _____ Neutrons:_____ Electrons:_____	Element:_____ Atomic number: 15 Atomic Mass: 31

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Standard Notation

Bohr Diagram

Particles	
Protons: _____ Neutrons:_____ Electrons:_____	Element:_____ Atomic number: 9 Atomic Mass: 19